Docket No. 97-2
PATENT

CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office at facsimile number (703) 872-9306 addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231
on 2/12/03
BY: Suzanne Shadley
Suzanne Shadley

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Goldwasser, et al.		
Serial No.:	08/847,967	Group Art Unit:	1627
Filed:	04/22/1997	Examiner:	Baker, M.
For:	The Combinatorial Synthesis of Novel Materials		

Assistant Commissioner for Patents
Washington D.C. 20231

TRANSMITTAL LETTER

Sir:

Transmitted herewith (check all that apply):

[ ] Preliminary Amendment	[ ] Information Disclosure Statement
[X] Supplemental Response H	[ ] Petition Under 37 CFR 1.97(d)(2)
[ ] Response/Amendment After Final	[ ] Formal Drawings
[ ] Supplemental Amendment	[ ] Declaration Under 37 CFR 1.131
[X] Declaration of F.J. DiSalvo	[ ] Declaration Under 37 CFR 1.132
[X] Declaration of M. Devenney	[ ] Terminal Disclaimer
[ ] Supplemental Declaration	[ ] Small Entity Statement
[ ] Power of Attorney	[ ] Request for Refund
[ ] Change of Correspondence Address	[ ] Appeal
[ ] Associate Power of Attorney	[ ] Petition for Extension of Time (3 months)
[ ] Response to Missing Parts	[ ] Status Letter

to be filed in the above-identified patent application.

[X] No fee is required.

[X] The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 C.F.R. § 1.16, in connection with the paper(s) transmitted herewith, or credit any overpayment of same, to Deposit Account No. 50-0496.

A duplicate copy of this Transmittal Letter is transmitted herewith.

Docket No. 97-2
PATENT

Respectfully submitted,

Date: Feb. 12 2003

Paul A. Stone
Reg. No. 38, 628
Attorney for Applicant(s)

Symyx Technologies
3100 Central Expressway
Santa Clara, California 95051
Tel.: (408) 764-2000 Fax: (408) 773-4029

Symyx™

SYMYX TECHNOLOGIES, INC.
3100 CENTRAL EXPRESSWAY
SANTA CLARA, CA 95051
PHONE: 408-773-4027
FAX: 408-773-4029

FAX TRANSMITTAL SHEET

Date: February 12, 2003 **From:** Paul A. Stone Reg. No. 38,628

To: Assistant Commissioner of Patents Washington, DC 20231 **Fax No:** (703) 872-9306

Number of pages included in this fax: 39

In re Application of:	Goldwasser, et al.		
Serial No.:	08/847,967	Group Art Unit:	1627
Filed:	04/22/1997	Examiner:	Baker, M.
For:	The Combinatorial Synthesis of Novel Materials		

Dear Sir:

Enclosed please find copies of the following documents to be filed regarding the above identified patent application:

- **Transmittal – no fees (2 pages)**
- **Supplemental Response H (4 pages)**
- **Declaration of Francis J. DiSalvo Under 1.132 (12 pages)**
- **Declaration of Martin Devenney Under 1.132 (20 pages)**

Please enter these into the file and contact us if necessary.

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Respectfully Submitted,
Paul A. Stone
Reg. No. 38,628

Docket No. 97-2
PATENT

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BY: Suzanne Shadley
Suzanne Shadley

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#34
Appeal
2-2003

In re Application of:	Goldwasser et al.		
Serial No.:	08/847,967	Group Art Unit:	1627
Filed:	4/22/1997	Examiner:	Baker, M.
For:	The Combinatorial Synthesis of Novel Materials		

Assistant Commissioner for Patents
Washington, D.C. 20231

SUPPLEMENTAL RESPONSE H

Sir:

This Supplemental Response H is being submitted to make the enclosed Declaration of Francis J. DiSalvo and the enclosed Declaration of Martin Devenney of record in the above-identified patent application. This Response H supplements the previously-submitted Amendment F (filed November 4, 2002) and Amendment G (filed January 15, 2003).

Applicants respectfully request reconsideration of the above-referenced patent application in view of the enclosed declarations and the following remarks.

Declaration of Dr. Francis J. DiSalvo

Applicants are submitting herewith the Declaration of Francis J. DiSalvo (the "DiSalvo Declaration") under 37 C.F.R. §1.132 for consideration in connection with the above-identified patent application. Dr. DiSalvo has considerable experience in the field of inorganic materials, including chemistry and solid-state chemistry. (*See* paragraph 2 of the DiSalvo Declaration).

Dr. DiSalvo concludes, based upon a review of the currently pending claims (independent claims 42, 68, 70, 72, 74, 84 and 88 and claims depending therefrom), and upon a review of the prior art relied upon in the most recent Office action, that at a time prior to October 18, 1994, a person of ordinary skill in the art would not have been led from these references to the invention defined by the currently pending claims. (*See* paragraphs 7-14 of the DiSalvo Declaration). The analysis presented by Dr. DiSalvo clearly demonstrates that the presently-defined inventions would not have been obvious in view of the art of record.

In summary, even if Fister *et al.* and Cavicchi *et al.* are, *arguendo*, considered in combination, they do not disclose or suggest important features of Applicants' invention. Significantly, for example, neither Fister *et al.* or Cavicchi *et al.* disclose or suggest preparing arrays of diverse materials using a protocol that includes varying the composition, concentration, stoichiometry or thickness of the *delivered* (*e.g.*, first or second) *component, as compared between respective material-containing regions* – a step that is required by each of the claims defining the present invention. (*See* paragraph 9 of the DiSalvo Declaration). Other required aspects of certain independent and/or dependent claims are likewise not taught or suggested by the references relied upon in this rejection, and in fact, the art of record teaches away from at least some of such inventions. Hence, the Office action does not establish obviousness, because technically and commercially significant features of the presently-claimed inventions are not taught or suggested by the prior art relied upon in the Office action. The law is clear that "to establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art." *See* MPEP Sec. 2143.03; *In re Royka*, 180 USPQ 580 (CCPA 1974).

Additionally, and independently of the aforementioned reasons, *prima facie* obviousness is not established because the Office action does not demonstrate motivation existing in the art that would have led a skilled artisan to combine the teaching of the references in a manner that would have led to the claimed inventions. (*See* paragraphs 9 to 14 of the DiSalvo Declaration). As noted in the previously-submitted Amendment F, to the extent that the Office action attempts to extrapolate the cited basis for motivation in order to derive Applicants' invention, such extrapolated motivation is improperly relied upon, in that it is not derived from the teachings of the cited art. Further, to the extent that the Examiner is extrapolating a more general basis for motivation from the teachings of Cavicchi *et al.*, or is relying on some other more general understanding in the art, Applicants respectfully submit that the asserted motivation resulting

from such extrapolation is inadequate to establish a *prima facie* case of obviousness under the law because it is too general to motivate a skilled artisan to arrive at the specific invention defined by the claims at issue. *See In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 5 USPQ2d 1529 (Fed. Cir. 1988); *In re Geiger*, 2 USPQ2d 1276 (Fed. Cir. 1987).

Further, Dr. DiSalvo has testified to facts that support the non-obviousness of the present inventions based on objective considerations. (*See* paragraph 14 of the DiSalvo Declaration). In particular, Dr. DiSalvo notes the significant contribution of the inventions with respect to advancing materials discovery research, and especially thin-film inorganic materials research.

Accordingly, applying the law to the facts that are established by the DiSalvo Declaration can lead to only one set of conclusions: that the art does not teach all of the requirements of Applicants' invention, that the requisite motivation did not exist *in the art* at the time of Applicants' invention, and that objective considerations evidence non-obviousness. Therefore, the invention defined by the presently pending claims would not have been *prima facie* obvious.

Declaration of Dr. Martin Devenney

Applicants are also submitting herewith the Declaration of Martin Devenney (the "Devenney Declaration") under 37 C.F.R. §1.132 for consideration in connection with the above-identified patent application. Dr. Devenney has considerable experience in the field of inorganic materials synthesis and characterization, and in particular, in the synthesis, characterization, and evaluation of materials used in electrochemical systems. (*See* paragraph 2 of the Devenney Declaration). As the Director of the Electronic and Related Materials Group at Symyx Technologies, Inc., Dr. Devenney has a meaningful perspective regarding industrial adaptation of the techniques disclosed and claimed in Applicants' invention.

Dr. Devenney summarizes facts that clearly demonstrate the commercial success of Applicants' invention as defined by independent claims 42, 68, 70, 72, 74, 84 and 88 and claims depending therefrom. Notably, the synthesis of arrays of inorganic materials on a common substrate, as required by these claims, have been commercially applied by Symyx Technologies, Inc. in collaborative research efforts with a variety of corporatate and government research organizations having significant chemical research experience and knowledge. (*See* paragraph 4 of the Devenney Declaration). As detailed by Dr. Devenney, Symyx has successfully implemented collaborative research programs involving execution of the claimed methods for

preparing arrays of inorganic materials in many industrial markets, and has had successfully outlined certain technologies specifically designed to practice the claimed invention as part of Symyx' Discovery Tools® business. These activities unequivocally demonstrate the commercial success of Applicants inventions.

Hence, the non-obviousness of the inventions defined by the presently pending claims is also demonstrated by objective considerations. Such objective factors must be considered in evaluating the issue of nonobviousness. *See Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc.*, 24 USPQ2d 1321, 1333 (Fed. Cir. 1992); *Gillette Co. v. S.C. Johnson & Son, Inc.* 16 USPQ2d 1923, 1928 (Fed. Cir. 1990).

In view of the evidence submitted herewith, Applicants respectfully submit that the inventions defined by the presently-pending claims would not have been obvious to a person of ordinary skill in the art at the time of Applicants invention.

CONCLUSION

Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Although Applicants' believe that no further fees are required in connection with this Supplemental Response H, the Examiner is hereby authorized to charge any necessary and proper fees required in connection with this application, or to credit any refund in connection therewith, to Deposit Account No. 50-0496.

Respectfully submitted,

Paul A. Stone

Date Submitted: Feb. 12, 2003

Paul A. Stone
Reg. No. 38,628

Symyx Technologies, Inc.
3100 Central Expressway
Santa Clara, CA 95051
(408) 773-4027